MITSUBISHI ELECTRIC

MITSUBISHI HOME THEATER PROJECTOR

Functionality is Beauty

■ Specifications

Model			HC6500
Projection system			Transmissive liquid crystal system
Panel specs	Panel size		0.74type x3 Aspect ratio 16:9
	Number of pixels		1920x1080
	Drive system		3 primary color liquid crystal shutter system
	Array		Stripe pattern
Optical specs	Zoom / focus operation		1.6-power zoom / motorized
	Lens shift		Motorized up-down 75% / right-left 5%
	Throw ratio		1.40-2.26
	Projection lens		f=23.5-37.6mm / 0.9"-1.5" F1.8-2.3
	Light source lamp		160W
	Optical system		Mirror color separation / prism synthesis system
	Iris		Auto-iris
Projection screen size (inches)			50-300
Images	Brightness (lm)		1200
	Contrast ratio		15000:1 (auto-iris) typ.
	Resolution	PC input	VGA* 640x480 - UXGA* 1600x1200
	Scan frequency	Horizontal (kHz)	15-100
		Vertical (Hz)	24, 50-120
Input signal system	Video		NTSC, NTSC4.43, PAL (including PAL-M and N), SECAM, PAL-60 Video input: 480i/p, 576i/p, 1080i 60/50, 1080p 60/50/24, 720p 60/50
	PC		PC/AT compatibles, Mac
Input	PC input	Mini D-Sub 15 pin	1 terminal
	Video HDMI input	HDMI terminal	2 terminals
	Video Composites	RCA terminal	1 terminal
	Video S	S-Video terminal	1 terminal
	Video Components	RCA terminal	1 terminal (component can be also input to Mini D-Sub 15 pin)
	Serial / RS-232C standard		1 terminal (D-Sub 9 pin)
Output	Trigger terminal		1 terminal
Functions	Digital keystone		Vertical ±15steps
	Fan noise		17dBA (at low mode)
	Power source voltage		AC100V 50/60Hz
	Power consumption (W)		250 (at waiting 7W)
	Weight (kg / lbs)		7.5 / 16.5
	Main unit dimensions WxDxH		427x440x159mm / 16.8"x17.3"x6.3" (excluding height adjustment)
Other	Supplied accessories		Power source cord (2.9m), Remote control, AA batteries (x2), RGB signal cable, RS-232C cable, Lens cap, Lamp replacement tray

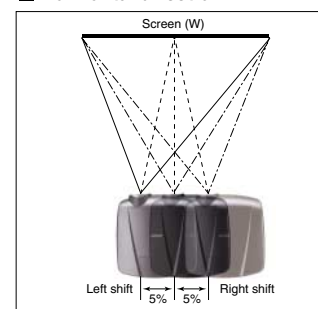*: SVGA,XGA,WXGA,SXGA,UXGA are registered trademarks of IBM Corporation of the United States

■ Projection distance

Screen size (16:9)

Diagonal		W (width)	H (height)	Max Zoom	Min Zoom	Down	Up	Left	Right
inch	cm	cm	cm	m	m	cm	cm	cm	cm
50	127	111	62	1.5	2.5	47 ← 0 → 47	6 ← 0 → 6		
60	152	133	75	1.8	3.0	56 ← 0 → 56	7 ← 0 → 7		
70	178	155	87	2.2	3.5	65 ← 0 → 65	8 ← 0 → 8		
80	203	177	100	2.5	4.0	75 ← 0 → 75	9 ← 0 → 9		
90	229	199	112	2.8	4.5	84 ← 0 → 84	10 ← 0 → 10		
100	254	221	125	3.1	5.0	93 ← 0 → 93	11 ← 0 → 11		
110	279	244	137	3.4	5.5	103 ← 0 → 103	12 ← 0 → 12		
120	305	266	149	3.8	6.0	112 ← 0 → 112	13 ← 0 → 13		
130	330	288	162	4.1	6.5	121 ← 0 → 121	14 ← 0 → 14		
140	356	310	174	4.4	7.0	131 ← 0 → 131	15 ← 0 → 15		
150	381	332	187	4.7	7.6	140 ← 0 → 140	17 ← 0 → 17		
200	508	443	249	6.3	10.1	187 ← 0 → 187	22 ← 0 → 22		
250	635	553	311	7.9	12.6	233 ← 0 → 233	28 ← 0 → 28		
300	762	664	374	9.5	15.2	280 ← 0 → 280	33 ← 0 → 33		

Column groups: Screen size (16:9) [Diagonal, W, H], Projection distance [Max Zoom, Min Zoom], Up-down lens shift [Down, Up], Right-Left lens shift [Left, Right]

Screen size (4:3) / Projection image size (16:9)

Diagonal		W (width)	H (height)	Diagonal	W (width)	H (height)	Black zone	Max Zoom	Min Zoom	Down	Up	Left	Right
inch	cm	cm	cm	cm	cm	cm	cm	m	m	cm	cm	cm	cm
50	127	102	76	117	102	57	10	1.4	2.3	43 ← 0 → 43	5 ← 0 → 5		
60	152	122	91	140	122	69	11	1.7	2.7	51 ← 0 → 51	6 ← 0 → 6		
70	178	142	107	163	142	80	13	2.0	3.2	60 ← 0 → 60	7 ← 0 → 7		
80	203	163	122	187	163	91	15	2.3	3.7	69 ← 0 → 69	8 ← 0 → 8		
90	229	183	137	210	183	103	17	2.6	4.1	77 ← 0 → 77	9 ← 0 → 9		
100	254	203	152	233	203	114	19	2.9	4.6	86 ← 0 → 86	10 ← 0 → 10		
110	279	224	168	256	224	126	21	3.1	5.1	94 ← 0 → 94	11 ← 0 → 11		
120	305	244	183	280	244	137	23	3.4	5.5	103 ← 0 → 103	12 ← 0 → 12		
130	330	264	198	303	264	149	25	3.7	6.0	111 ← 0 → 111	13 ← 0 → 13		
140	356	284	213	326	284	160	27	4.0	6.5	120 ← 0 → 120	14 ← 0 → 14		
150	381	305	229	350	305	171	29	4.3	6.9	129 ← 0 → 129	15 ← 0 → 15		
200	508	406	305	466	406	229	38	5.8	9.3	171 ← 0 → 171	20 ← 0 → 20		
250	635	508	381	583	508	286	48	7.2	11.6	214 ← 0 → 214	25 ← 0 → 25		
300	762	610	457	699	610	343	57	8.7	13.9	257 ← 0 → 257	30 ← 0 → 30		

Column groups: Screen size (4:3) [Diagonal, W, H], Projection image size (16:9) [Diagonal, W, H, Black zone], Projection distance [Max Zoom, Min Zoom], Up-down lens shift [Down, Up], Right-Left lens shift [Left, Right]

■ Vertical direction

Screen / 25% / 50% / 50% / 25% / Screen height (H) / Maximum shift / Maximum shift
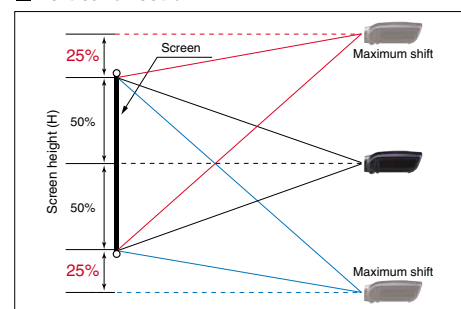
■ Horizontal direction

Screen (W) / Left shift 5% 5% Right shift

■ Option

Color domain expansion filter
CF6000

Replacement lamp
VLT-HC7000LP

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To find out more about HC6500 and our projectors, visit us at

Global.MitsubishiElectric.com/projectors/

NEW **HC6500**

Today, Exceptional Performance Means Exceptional Design

And that's exactly what you'll find in the new HC6500 home theater projector.

Exquisite colors, high-contrast images and impressive picture reproduction are ensured with Mitsubishi's innovative hybrid D6 drive and Auto Iris 15000:1 high-contrast technologies.

These and other advanced functions are packaged into an ergonomic and aesthetically pleasing black chassis that blends easily with any room environment.
In a single word, it's "Futuristic".

Pioneering the future of home theater systems.

NEW **HC6500**

Newly Developed Auto-Iris Algorithm with Quick 1/60-sec Control

Astoundingly beautiful color reproduction is what the HC6500 offers thanks to the incorporation of the Auto-Iris control algorithm, a feature commonly found in higher priced models. The technology's been evolved to be faster and more accurate, and now provides picture reproduction at a maximum high-contrast ratio of 15000:1. The light intensity of the pixel level for each image displayed on the screen is calculated precisely so that dark scenes are toned down to the appropriate black level even when scene sequences continuously switch between bright and dark images. This ensures the faithful reproduction of every scene detail with vivid clarity. Combined with Mitsubishi's original contrast control function, Auto-Iris delivers the richest blacks, the brightest whites, and the vivid richness of every color in between.
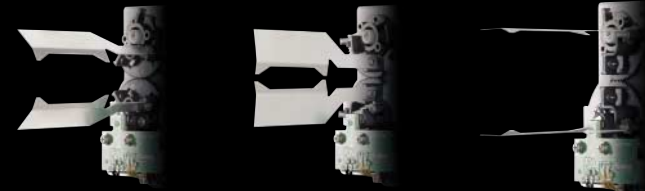
■ New Auto-Iris (HC6500)

■ Previous Auto-Iris (HC5000)

Extra-low Dispersion Glass Lenses for Full High-definition Resolution (1920x1080)

Superior image reproduction is achieved as the result of adopting a 17-lens/14-group optical system equipped with extra-low dispersion (ED) glass lenses. Far exceeding the performance of conventional glass lenses, improved resolution is apparent across the entire screen and chromatic aberration is virtually eliminated, even in peripheral areas.

ED (extra-low dispersion) glass lenses

Power Zoom/Focus Adjustment and Lens Shift Functions Greatly Simplify Set-up
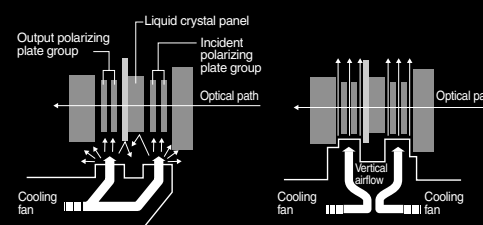
The HC6500 is equipped with a powered 1.6x zoom/focus lens, making it easy to set-up and show impressive big-screen images even in the smallest of rooms. A powered Lens Shift function is included as well, making vertical and horizontal adjustment as simple as pressing a button regardless of where the unit is located.

Lens shift right-left motor drive
Lens shift up-down motor drive
Focus motor
Zoom motor
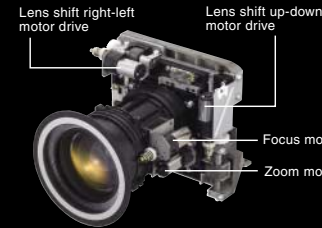
Quiet 17dBA Operation (at low mode)

The new cooling duct design contributes to improved cooling performance, and a smaller fan motor is adopted to secure a larger air-intake area and better intake-air efficiency for the large (low-noise) Sirocco fan. Furthermore, always striving for unprecedented quietness, a seemingly seamless structure was developed the new chassis, effectively preventing sound permeation and realizing a hushed 17dBA during operation–the quietest in the industry.

■ Conventional cooling structure　■ New cooling structure

Output polarizing plate group
Liquid crystal panel
Incident polarizing plate group
Optical path
Optical path
Cooling fan
Vertical airflow
Cooling fan
Cooling fan

Conventional Sirocco fan　HC6500 Sirocco fan

New cooling structure for quiet operation

HQV – Unparalleled Image Reproduction Performance

■ **Reon-VX: Next-generation high-performance processor**
The Reon-VX is successor to the Realta chip manufactured by Silicon Optics Inc., renowned for its IC solutions that deliver Hollywood Quality Video (HQV). This high-performance chip excels behind the scenes as the genuine core of the superior high picture quality and visual impact of the HC6500.

■ **High-precision I/P conversion for all signal sources**
Extremely accurate rendering is provided by Mitsubishi's 10-bit interlace/progressive (I/P) conversion image processing technology. Regardless of the source, signals are detected and processed quickly and with the utmost precision–even signals from mixed video/film media. Signals received from terrestrial or broadcast satellite digital movies are processed using 2-3 pulldown technology, which removes the "jaggies" (jagged outlines) for vivid, clear images. Highly precise three-dimensional (3D) processing is included to convert video signals into scenes with meticulous picture quality, and new-generation 24P disc is supported as well.

■ **High-performance video scaler**
This ultra-precise image scaling function guarantees superior pixel conversion processing when converting resolution up from 720x480p to 1920x1080p. A unique filtering technique enables adaptive switching to a total of 1024 filter tabs each horizontally and vertically, further contributing to the high-definition picture quality of the images.

■ **Chromatic up-sampling errors reduced**
The Reon-VX chip also properly compensates for the loss of color data resulting from signal compression at the production level of most DVD titles. This function enables a more faithful reproduction of the full color spectrum in high-definition images without color blur or loss.

Two HDMI 1.3 Input Terminals Compatible with "Deep Color"

The HC6500 is capable of processing 10- and 12-bit video signals in addition to conventional 8-bit signal, thereby reproducing high-contrast images utilizing full-color gradation.

HDMI IN-1　HDMI IN-2

14-bit Digital Gamma Correction

Mitsubishi's original 14-bit gamma correction processing function expands gradation expression power 16-fold over the conventional 10-bit technology. This dramatically raises the projector's ability to reproduce the subtleties in dark images.

## Next-generation High-definition Liquid crystal Panel (1920x1080)

This next-generation inorganic liquid crystal panel generates high-definition images with the richest blacks and sharpest colors. The rated panel service life is approximately 10 times longer than that of conventional organic film panels, translating into years of enjoyment viewing high-definition images that come to life through vibrant color reproduction.

24P Blu-ray Direct Input Compatibility Reproduction of Original Images and Motion

The HC6500 can play signals from most media, including the next-generation Blu-ray 24P optical disk. Compatible with an output of up to 48P (96Hz liquid crystal panel driver), twice the speed of conventional movie signals (24 frames/sec), amazingly life-like images and motion are reproduced with a smoothness and texture detail that mirror the original.
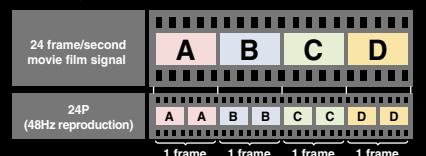
2-3 pulldown
When processing images at 60 frames/sec, lining up the signals up in 2- or 3-frame sequences causes overflow into the third B-frame, thereby detracting from motion smoothness.
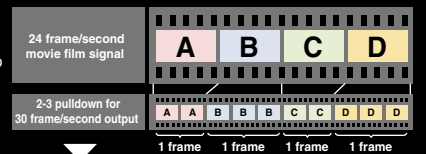
24P direct output
With the signal processing speed of 24 frames/sec increased to 48 frames/sec, a sequence is created that aligns the signals. The bottom line is a smooth and fluid reproduction of the original image.

24 frame/second movie film signal — A B C D
2-3 pulldown for 30 frame/second output — A A B B B C D D D
1 frame　1 frame　1 frame　1 frame

24 frame/second movie film signal — A B C D
24P (48Hz reproduction) — A A B B C C D D
1 frame　1 frame　1 frame　1 frame

■ 3D Micro-surface Structure Air Filter
■ Side-loading, Long-life Lamp (max.5000 hours)
■ Trigger Terminal

The Mitsubishi HC6500 is designed to match the needs of the most sophisticated home theater, yet can be quickly integrated into the simplest of entertainment systems as well. A trigger connector for controlling a powered-screen drive is included, enabling quick set-up and operation and contributing further to your home theater enjoyment experience.